



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Ted Stewart
Executive Director

James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

February 3, 1994

TO: Minerals File

FROM: Anthony Gallegos, Reclamation Engineer *adg*

RE: Preliminary Permitting Meeting, Kennecott Utah Copper (KUC), File Number Pending, North Ore Shoot Project, M/035/016, Utah County, Utah

A meeting was held at the Division on January 27, 1994, to discuss permitting requirements for KUC's North Ore Shoot Project. Present at the meeting were Don Deines, Fred Fox, and Geoff Ballantyne of KUC; Wayne Hedberg, Travis Jones, and Tony Gallegos representing the Division. Mr. Ballantyne is Project Manager for the North Ore Shoot project.

The meeting began with an overview of the project proposal presented by Mr. Ballantyne. A set of summary sheets was included in the presentation (copy sent to file). The project would first involve dewatering the existing underground workings. This is expected to require about six months. The present workings consist of a 3,000 foot shaft and 12,300 feet of underground drifts. The workings were allowed to flood in 1986. The shaft bottom is at the 3,000 foot elevation and is approximately 5-7,000 feet laterally from the Bingham Pit bottom. The depth of the pit is presently at the 4,900 foot elevation. Water pumped from the workings is expected to be absorbed by Kennecott's ongoing ore processing operations. Mr. Ballantyne indicated that the quality of the water was described as "good" when the mine was actively being pumped.

After the workings are dewatered the shaft and drifts will be rehabilitated. A new 500 foot drift will be driven along with an additional 40,000 feet of geotechnical drilling. The excavation of five test stopes will follow, each measuring approximately 17 feet in height and width by 100 feet long (@1000 linear feet of development). Approximately 25,000 tons of ore and waste will be produced during this test phase of mining. Both ore and waste will be railed to the Bonneville Concentrator for processing. KUC wishes to keep supplementary roof support measures to a minimum outside of the main haulage drifts. A cut and fill stoping system of mining is currently proposed. Plans are to use slurried mill tailings combined with cement, lime and/or other ingredients as the backfill.



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A conceptual schedule for these activities would begin with dewatering in August 1994 and end with the test mining complete in February 1996. After this, KUC would then decide if a full scale underground mine is feasible. If KUC decides to proceed with full scale mine development, a new ventilation shaft would need to be sunk, along with development of an ore haulage system. Ore haulage options include truck haulage to the Bingham Canyon in-pit crusher or a surface conveyor haulage to a rail loadout. Most waste generated from the mining operations would be disposed of underground. Additional surface facilities would also be needed. These would probably include a stockpile, batch plant and piping, a changehouse, and several offices.

The type of permit submission desired by the Division was discussed during the meeting. Initially, a small mine operation or an exploration notice were contemplated as possible permitting approaches, since the first part of the project would be short lived and the next phase may or may not be implemented. However, due to the Division's policy on neighboring or related sites, this project would probably be more appropriately categorized as an amendment/revision to the existing large mining notice, namely, the Bingham Canyon permit (M/035/002). It was mutually agreed that for convenient tracking purposes, it would be best to give the North Ore Shoot project a separate file/permit number. KUC would like to formally submit their proposal by the end of February 1994.

The meeting concluded with the understanding that the Division would: 1) Review the Division's Bingham Pit file for the initial 1980 correspondence dealing with the original North Ore Shoot underground development project. 2) Make a formal decision on the preferred mode of submittal for the new North Ore Shoot project, i.e. SMO-NOI, EXP-NOI, or LMO Amendment/Revision, and inform KUC of this preference by **February 4, 1994**.

jb
cc: Fred Fox, KUC
John Whitehead, DWQ
Lowell Braxton, DOGM (route)
Oreshoot.mem